

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

BUREAU OF AIR

DIVISION of AIR POLLUTION CONTROL

PERMIT SECTION

PROJECT SUMMARY for the
DRAFT RENEWAL of the Clean AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

Electro-Motive Diesel, Inc
9301 West 55th Street
McCook, Illinois 60525

Illinois EPA ID Number: 031174AAA

Application Number: 95120282

Application Type: Renewal Permit

Start of Public Comment Period: 10/19/2006

Close of Public Comment Period: 11/18/2006

Permit Engineer/Technical Contact: Sunil Suthar, 217/782-2113

Community Relations/Comments Contact: Brad Frost, 217/782-7027

(This Project Summary generally describes the source and explains the draft permit. This document has been prepared pursuant to Section 39.5(8)(b) of the Illinois Environmental Protection Act, which requires "a statement that sets forth the legal and factual basis for the draft CAAPP permit conditions.")

I. INTRODUCTION

This source has applied for a renewal of the Clean Air Act Permit Program (CAAPP) operating permit. The CAAPP is the program established in Illinois for operating permits for significant stationary sources as required by Title V of the federal Clean Air Act and Section 39.5 of Illinois' Environmental Protection Act. The conditions in a CAAPP permit are enforceable by the Illinois Environmental Protection Agency (Illinois EPA), the USEPA, and the public. This document is for informational purposes only and does not shield the Permittee from enforcement actions or its responsibility to comply with applicable regulations. This document shall not constitute a defense to a violation of the Act or any rule or regulation.

A CAAPP permit contains conditions identifying the applicable state and federal air pollution control requirements that apply to a source. The permit also establishes emission limits, appropriate compliance procedures, and specific operational flexibility. The appropriate compliance procedures may include monitoring, record keeping, and reporting to show compliance with these requirements. The Permittee must carry out these procedures on an on-going basis to demonstrate that the source is operating in accordance with the requirements of the permit. Further explanations of the specific provisions of the draft CAAPP permit are contained in the attachments to this document, which also identify the various emission units at the source.

II. GENERAL SOURCE DESCRIPTION

a. Nature of source

The Electro-Motive Diesel, Inc., is located at 9301 West 55th Street in McCook, which is located in Cook County. Electro-Motive Diesel, Inc. manufactures various locomotive components and diesel engines at this facility. Raw materials are received in the form of steel plates, rods, castings, et cetera. Processes such as cutting, grinding, milling, drilling, heat-treating, and welding are used to transform these materials into finished parts. The finished parts obtained from the various departments and off-site are assembled into complete components and engines. Engines and some components are tested and painted.

b. Ambient air quality status for the area

This permit is issued based on the source being located in an area that, as of the date of permit issuance, is designated nonattainment for the National Ambient Air Quality Standards for ozone (moderate nonattainment) and PM_{2.5} and attainment or unclassifiable for all other criteria pollutants CO, NO₂ SO₂, Lead, PM₁₀.

c. Major source status

1. The source requires a CAAPP permit as a major source of NO_x, PM₁₀, and VOM emissions.
2. The source also requires a CAAPP permit because the source is considered a single source with NICOR Home Services, LLC, I.D. No. 031174ACH, located at 9301 West 55th Street, McCook. The Permittees have elected to obtain separate CAAPP permits for their operations.

d. Source Emissions

The following table lists annual emissions of criteria pollutants from this source, as reported in the Annual Emission Reports sent to the Illinois EPA.

	Annual Emissions (tons)	
Pollutant	2003	2004
CO	33.26	36.86
NO _x	610.90	689.01
PM	21.92	26.55
SO ₂	28.28	34.75
VOM	25.95	33.24
Top HAP	---	---

III. NEW SOURCE REVIEW/TITLE I CONDITIONS

This draft permit contains terms and conditions that address the applicability of permit programs for new and modified sources under Title I of the Clean Air Act (CAA) and regulations promulgated thereunder, including 40 CFR 52.21, Prevention of Significant Deterioration (PSD) and 35 IAC Part 203, Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within the draft permit by T1, T1R, or T1N. Any conditions established in a construction permit pursuant to Title I and not revised or deleted in this draft permit, remain in effect pursuant to Title I provisions until such time that the Illinois EPA revises or deletes them. Where the source has requested that the Illinois EPA establish new conditions or revise such conditions in a Title I permit, those conditions are consistent with the information provided in the CAAPP application and will remain in effect pursuant to Title I provisions until such time that the Illinois EPA revises or deletes them.

This draft permit would not establish any new Title I requirements or revised Title I requirements.

IV. COMPLIANCE INFORMATION

The source has certified compliance with all applicable rules and regulations; therefore, a compliance schedule is not required for this source. In addition, the draft permit requires the source to certify its compliance status on an annual basis.

V. PROPOSED ILLINOIS EPA ACTION/REQUEST FOR COMMENTS

It is the Illinois EPA's preliminary determination that this source's permit application meets the standards for issuance of a CAAPP permit. The Illinois EPA is therefore proposing to issue a CAAPP permit, subject to the conditions proposed in the draft permit.

Comments are requested by the Illinois EPA for the draft or proposed permit, pursuant to 35 IAC Part 252 and Sections 39.5(8) and (9) of the Illinois Environmental Protection Act. A final decision on the draft or proposed permit will not be made until the public, affected states, and USEPA have had an opportunity to comment. The Illinois EPA is not required to accept recommendations that are not based on applicable requirements. If substantial public interest is shown in this matter, the Illinois EPA will consider holding a public hearing in accordance with 35 IAC Part 166.

ATTACHMENT 1: Summary of Source-Wide Requirements

The following table indicates the source-wide emissions control programs and planning requirements that are applicable to this source. These programs are addressed in Sections 5 and 6 of the draft permit.

Program/Plan	Applicable
Emissions Reduction Market System (ERMS) ¹	Yes
Nitrogen Oxides (NO _x) Trading Program	No
Acid Rain Program	No
Compliance Assurance Monitoring (CAM) Plan	No
Fugitive Particulate Matter (PM) Operating Program	No
Risk Management Plan (RMP)	No
PM ₁₀ Contingency Measure Plan ²	Yes

1. The ERMS is a market-based program designed to reduce VOM emissions from stationary sources located in the Chicago ozone non-attainment area in order to contribute to reasonable further progress toward attainment (35 IAC Part 205). If applicable, this program is further described in Section 6.0 of the draft permit, including the Illinois EPA's determination of the source's baseline emissions and allotment of trading units under the ERMS.
2. PM₁₀ Contingency Measure Plan is a program for PM₁₀ emission reductions (35 IAC Part 212, Subpart U). The Permittee is required to maintain and have this plan on file with the Illinois EPA.

ATTACHMENT 2: Summary of Requirements for Specific Emission Units

The following tables include information on the requirements that apply to significant emission units at this source. The requirements are found in Section 7 of the draft permit, which is further divided into subsection, i.e., Section 7.1, 7.2, etc., for the different categories of units at the source. A separate table is provided for each subsection in Section 7 of the draft permit. An explanation of acronyms and abbreviations is contained in Section 2 of the draft permit.

Table 1 (Section 7.1 of the draft permit)

Emission Unit - Unit 01 – Process Emission Units	
Description	Alternator Assembly Line, Crankcase & Oil Pan Construction, Liner Line, Piston Line, Carrier Line, Connecting Rod Line
Date Constructed	After 1972
Emission Control Equipment	None
Applicable Rules and Requirements	
Emission Standards	<ul style="list-style-type: none">• 35 IAC 212.321• 35 IAC 212.324• 35 IAC 218.301• 35 IAC 214.301
Streamlining	None
Title I Conditions	None
Non-applicability	<ul style="list-style-type: none">• 35 IAC 217.121 for emissions of nitrogen oxides from new fuel combustion emission sources: The specific operations of unit 01 are not fuel combustion units as required for applicability of this rule.• 35 IAC 216.121 for emissions of carbon monoxide: The specific operations of unit 01 are not fuel combustion units as required for applicability of this rule.
Periodic Monitoring (other than basic regulatory requirements)	
Testing	None
Emissions Monitoring	None

Emission Unit - Unit 01 – Process Emission Units	
Operational Monitoring	None
Inspections	None
Recordkeeping	None
Other	
Reporting	
Prompt Reporting	Emissions of PM, or PM ₁₀ from an affected process emission unit that constitute a deviation from the limits specified in Condition 7.1.3, within 30 days of knowledge of such an occurrence; based on degree of severity of infraction with permit conditions.
Other Reporting	None
Other Information	
Footnotes	

Table 2 (Section 7.2 of the draft permit)

Emission Unit - Unit 02 - Coating operation		
Description	After assembly, parts are coated and baked in oven or air-dried	
Date Constructed	Emission Unit	Date Constructed
	Alternator Stator Priming	Before 1972
	Stator Varnish Dipping	After 1972
	Engine Paint Booth	After 1972
	Liner Painting	After 1972
	Alternator, Turbo and Miscellaneous Parts Painting	After 1972
Emission Control Equipment	None	
Applicable Rules and Requirements		
Emission Standards	<ul style="list-style-type: none">• IAC 35 Section 218.204(m)• 40 CFR 52.741(x)(6)(i)(B)• 35 IAC 212.321(a)	
Streamlining	None	
Title I Conditions	<ul style="list-style-type: none">• The draft permit contains limits on operation and emissions in Conditions 7.1.5 and 7.1.6. These limits were incorporated from Permits 95060230, 95120294, 96060014, 92080058.	
Non-applicability	<ul style="list-style-type: none">• 35 IAC 218.301, Use of Organic Material, pursuant to 35 IAC 218.209, Exemption From General Rule on Use of Organic Material which excludes the affected coating operation from this requirement.	
Periodic Monitoring (other than basic regulatory requirements)		
Testing	The VOM content of specific coatings and cleaning solvents used on the affected coating shall be determined according to USEPA Reference Methods 24 and 24A of 40 CFR 60 Appendix A and the procedures of 35 IAC 218.105(a), 218.208 and 218.211(a).	
Emissions Monitoring	None	
Operational Monitoring	None	

Emission Unit - Unit 02 - Coating operation	
Inspections	None
Recordkeeping	Records will provide assurance of compliance with applicable rules (see above) and emissions limitations.
Other	
Reporting	
Prompt Reporting	30 days to report deviations from permit conditions (based on degree of severity).
Other Reporting	None
Other Information	
Footnotes	

Table 3 (Section 7.3 of the draft permit)

Emission Unit - Unit 03 - Test Cells		
Description	Electro-Motive Diesel operates engine and turbo production test cells, Research and Development (R & D) test cells, and test cells for durability testing of diesel engines manufactured at the plant. The engines are fired with diesel fuel.	
Date Constructed	Engine & Turbo Production Test Cells	Before 1970
	R & D Test Cells	Before 1970
	Engine Durability Test Cells MU1 through MU5	MU1 Modified 1999 MU2 Before 1972 MU3 Before 1972 MU4 in 1982 MU5 in 1989
Emission Control Equipment	None	
Applicable Rules and Requirements		
Emission Standards	<ul style="list-style-type: none">• 35 IAC 214.301• 35 IAC 218.301	
Streamlining	None	
Title I Conditions	<ul style="list-style-type: none">• The draft permit contains limits on operation and emissions in Conditions 7.3.5 and 7.3.6. These limits were incorporated from Permit 96080040.	
Non-applicability	None	
Periodic Monitoring (other than basic regulatory requirements)		
Testing	None	
Emissions Monitoring	None	
Operational Monitoring	None	
Inspections	None	
Recordkeeping	None	

Emission Unit - Unit 03 - Test Cells	
Other	
Reporting	
Prompt Reporting	<ul style="list-style-type: none"> • 30 day reporting requirement of deviations from permit conditions based on degree of severity. • Fuel usages and sulfur/ash content records with annual emission report to verify compliance with permit requirements.
Other Reporting	None
Other Information	
Footnotes	

Table 4 (Section 7.4 of the draft permit)

Emission Unit - Unit 04 - Storage Tank	
Description	The source operates storage tanks for storing petroleum liquid.
Date Constructed	After 1972
Emission Control Equipment	Submerged Loading
Applicable Rules and Requirements	
Emission Standards	<ul style="list-style-type: none"> • 35 IAC 218.122(d) • 35 IAC 218.583(a)(1)
Streamlining	None
Title I Conditions	None
Non-applicability	35 IAC 218.121: because the tank is less than 40,000 gal
Periodic Monitoring (other than basic regulatory requirements)	
Testing	None
Emissions Monitoring	None
Operational Monitoring	None
Inspections	None
Recordkeeping	None
Other	
Reporting	
Prompt Reporting	<ul style="list-style-type: none"> • Report no submerged loading within 5 days of knowledge due to severity and potential VOM emissions without control. • Report a deviation from the control requirements (Condition 7.4.5) due to damage, deterioration, or other condition of the loading pipe, within 30 days of becoming aware of the deviation; severity of each case could vary. Case by case analysis required to evaluate severity.

Emission Unit - Unit 04 - Storage Tank	
Other Reporting	None
Other Information	
Footnotes	

Table 5 (Section 7.5 of the draft permit)

Emission Unit - Unit 05 Carrier line solvent washer	
Description	The Carrier line solvent washer is a cold cleaning tank used for cleaning piston carrier for the engine. This washer utilizes mineral spirits as the solvent in this process. The mineral spirits is a high flash, non-photochemically reactive, solvent containing no hazardous air pollutants (HAPs). The washer is enclosed with a conveyor to move parts in and out of the washer. The openings into the washer have a plastic flap, which remains closed except when parts are physically moving into or out of the washer.
Date Constructed	After 1972
Emission Control Equipment	None
Applicable Rules and Requirements	
Emission Standards	<ul style="list-style-type: none"> • 35 IAC 218.301 • 35 IAC 218.182(b)
Streamlining	None
Title I Conditions	None
Non-applicability	35 IAC 218.182(b)(5): the solvent washer is closed when the parts are inside the washer
Periodic Monitoring (other than basic regulatory requirements)	
Testing	None
Emissions Monitoring	None
Operational Monitoring	None

Emission Unit - Unit 05 Carrier line solvent washer	
Inspections	None
Recordkeeping	None
Other	
Reporting	
Prompt Reporting	30 day due to lower degree of severity in infractions of permit conditions.
Other Reporting	None
Other Information	
Footnotes	

Table 6 (Section 7.6 of the draft permit)

Emission Unit - Unit 06 - Fugitive Emissions	
Description	Fugitive emissions are defined as those emissions, which would not reasonably pass through a stack, vent or other functionally equivalent opening.
Date Constructed	After 1972
Emission Control Equipment	None
Applicable Rules and Requirements	
Emission Standards	35 IAC 218.301
Streamlining	None
Title I Conditions	None
Non-applicability	None
Periodic Monitoring (other than basic regulatory requirements)	
Testing	None

Emission Unit - Unit 06 - Fugitive Emissions	
Emissions Monitoring	None
Operational Monitoring	None
Inspections	None
Recordkeeping	None
Other	
Reporting	
Prompt Reporting	30 day period due to degree of severity of infractions with permit.
Other Reporting	None
Other Information	
Footnotes	

ATTACHMENT 3: Prompt Reporting of Deviations

Prompt reporting of deviations is critical in order to have timely notice of deviations and the opportunity to respond, if necessary. The effectiveness of the permit depends upon, among other important elements, timely and accurate reporting. The Illinois EPA, USEPA and the public rely on timely and accurate reports submitted by the permittee to measure compliance and to direct investigation and follow-up activities. Prompt reporting is evidence of a permittee's good faith in disclosing deviations and describing the steps taken to return to compliance and prevent similar incidents.

Any occurrence that results in an excursion from any emission limitation, operating condition, or work practice standard as specified in this CAAPP permit is a deviation subject to prompt reporting. Additionally, any failure to comply with any permit term or condition is a deviation of that permit term or condition and must be reported to the Illinois EPA as a permit deviation. The deviation may or may not be a violation of an emission limitation or standard. A permit deviation can exist even though other indicators of compliance suggest that no emissions violation or exceedance has occurred. Reporting permit deviations does not necessarily result in enforcement action. The Illinois EPA has the discretion to take enforcement action for permit deviations that may or may not constitute an emission limitation or standard or the like, as necessary and appropriate.

Section 39.5(7)(f)(ii) of the Illinois Environmental Protection Act, which mirrors 40 CFR 70.6(a)(3)(iii)(B), requires prompt reporting of deviations from the permit requirements. The permitting authority (in this case, Illinois EPA) has the discretion to define "prompt" in relation to the degree and type of deviation likely to occur. Furthermore, Section 39.5(7)(f)(i) of the Illinois Environmental Protection Act, which mirrors 40 CFR 70.6(a)(3)(iii)(A) requires that monitoring reports must be submitted at least every 6 months. Therefore, USEPA generally considers anything less than 6 months to be "prompt" as long as the selected time frame is justified appropriately (60 Fed. Reg. 36083, 36086 (July 13, 1995)).

The USEPA has stated that, for purposes of administrative efficiency and clarity, it is acceptable to define prompt in each individual permit. *Id.* The Illinois EPA has elected to follow this approach and defines prompt reporting on a permit by permit basis. In instances where the underlying applicable requirement contains "prompt" reporting, this frequency or a shorter frequency of reporting is the required timeframe used in this permit. Where the underlying applicable requirement fails to explicitly set forth the timeframe for reporting deviations, the Illinois EPA has developed a structured manner to determine the reporting approach used in this permit.

The Illinois EPA generally uses a time frame of 30 days to define prompt reporting of most deviations. Also, for certain permit conditions in individual permits, the Illinois EPA may require an alternate timeframe that is less than 30 days if the permit requirement justifies a shorter reporting time period. Under certain circumstances, EPA may establish a deviation

reporting period longer than 30 days, but, in no event exceeding 6 months. Where it has established a deviation reporting period other than 30 days in an individual permit (specifically Section 7.x.10), the Illinois EPA has explained the reason for the alternative timeframe. (See Attachment 2 of this Project Summary.)

The timing for certain deviation reporting may be different when a source or emission unit at a source warrants reporting to address operation, independent of the occurrence of any deviations. This is the case for a source that is required to perform continuous monitoring for the emission unit, for which quarterly or semi-annual “monitoring” reports are appropriate. Where appropriate, reporting of deviations has generally been combined in, or coordinated with these quarterly or semi-annual reports, so that the overall performance of the plant can be reviewed in a comprehensive fashion. This will allow a more effective and efficient review of the overall performance of the source by the Illinois EPA and other interested parties, as well as by the source itself.

At the same time, there are certain deviations for which quicker reporting is appropriate. These are deviations for which individual attention or concern may be warranted by the Illinois EPA, USEPA, and other interested parties. Under this scenario, emphasis has been placed primarily on deviations that could represent substantial violations of applicable emission standards or lapses in control measures at the source. For these purposes, depending on the deviation, immediate notification may be required and preceded by a follow-up report submitted within 15 days, during which time the source may further assess the deviation and prepare its detailed plan of corrective action.

In determining the timeframe for prompt reporting, the Illinois EPA assesses a variety of criteria such as:

- historical ability to remain in continued compliance,
- level of public interest in a specific pollutant and/or source,
- seriousness of the deviation and potential to cause harm,
- importance of applicable requirement to achieving environmental goals,
- designation of the area (i.e., non-attainment or attainment),
- consistency among industry type and category,
- frequency of required continuous monitoring reports (i.e., quarterly),
- type of monitoring (inspection, emissions, operational, etc.), and
- air pollution control device type and operation

These prompt reporting decisions reflect the Illinois EPA’s consideration of the possible nature of deviations by different emission units and the responses that might be required or taken for those different types of deviations. As a consequence, the conditions for different emission units may identify types of deviations which include but are not limited to: 1) Immediate (or very

quick) notification; 2) Notification within 30 days as the standard; or 3) Notification with regular quarterly or semi-annual monitoring reports.

The Illinois EPA's decision to use the above stated prompt reporting approach for deviations as it pertains to establishing a shorter timeframe in certain circumstances reflects the criteria discussed as well as USEPA guidance on the topic.

- 40 CFR 71.6(a)(3)(iii)(B) specifies that certain potentially serious deviations must be reported within 24 or 48 hours, but provides for semi-annual reporting of other deviations. (Serious or severe consequences)
- FR Vol. 60, No. 134, July 13, 1995, pg. 36086 states that prompt should generally be defined as requiring reporting within two to ten days of the deviation, but longer time periods may be acceptable for a source with a low level of excess emissions. (intermediate consequences)
- Policy Statement typically referred to as the "Audit Policy" published by the USEPA defines prompt disclosure to be within 21 days of discovery. (Standard for most "pollutant limiting" related conditions)
- Responses to various States by USEPA regarding other States' definition of prompt.

As a result, the Illinois EPA's approach to prompt reporting for deviations as discussed herein is consistent with the requirements of 39.5(7)(f)(ii) of the Act as well as 40 CFR part 70 and the CAA. This reporting arrangement is designed so that the source will appropriately notify the Illinois EPA of those events that might warrant individual attention. The timing for these event-specific notifications is necessary and appropriate as it gives the source enough time to conduct a thorough investigation into the causes of an event, collecting any necessary data, and to develop preventative measures, to reduce the likelihood of similar events, all of which must be addressed in the notification for the deviation.